O.Grimm

Includes drive

Status-Display

Includes drive

Direct HW control

ISDC

Maybe: eLogBook

web

Config--Display

web

Quality-Display

web

Run-Display

web

Schedule-GUI

web

Runbook-Entry

web

Runbook-Display

Config-Database

Quality-/Result-Database

Run-Database

Meta-Schedule-Database

One Night-Schedule-Database

Runbook-Database

O.Grimm

Includes HV

DAQ-/Run-control

Evt-/Camera-Display

web/sms

Alarm-Display

O. Grimm

Alarm Handler

The alarm handler evaluates the status of the systems, compares the accessible current values with safety margins, and sends a message if an alarm status has been reached. This should not be build in but freely configurable from the Configuration database.

T.Bretz

Config Server

Configuration is retrieved upon request from the configuration server at startup and stored in a local file. The program always gets its configuration from the Local file. Configuration updates are re-read by restart of the program via DIM.

Create nightly schedule

Auto scheduler

ISDC

Auto starter (DB interface)

Systems taking action on run basis

Drive-control — **Drive** — T.Bretz

Rare Control — **FTU/FTM/FLP** — Q.Weitzel

DAQ-control — Q.Weitzel

Event Builder — **FAD** — A.Biland

W.Lusternmann — LV-Control — **LV-control**

W.Lustermann — LID — **Lid-control**

T.Bretz — TPoint-CCD — **Drive-cal--control**

T.Bretz — Tpoint LEDs

D.Neise — AUX (e.g. Temp) — **AUX-control**

O.Grimm — **HV Feedback**

W.Lustermann — HV-Control — **HV-control**

Systems working always and switched on

Run number

MCP

T.Bretz

Configure run Start/Sop run

Status monitoring

Env. Ctrl

W.Lustermann

Feedback events

Use Feeback events if n/a use Temp

Runs continously, writes one file/day opens a new file for each run

Start/Stop

Data logger

O. Grimm

Opening of run-files started/stoped by the event builder to ensure run-numbers being consistent

DAQ Startup procedure:

- Configure FTU/FTM/FAD
- Open new slow control files
- Req. values from all systems and write them
- Open new Raw-Data file
- Enable trigger

Raw-data

Log-file

Slow-control

MARS

Systems should be kept as simple as possible.
All intelligence / logic goes to EnvCtrl/MCP.

States to be defined together with the hardware and software responsible
Communication between the systems allowed but should be avoided

For consistency the drive might report its general availablitiy to the Env.Ctrl.

It migt turn out that run-db and schedule-db are the same

Surveillance Cam

NTP Server

Our time is PC time.
We synchronize all PCs to an NTP server.

Safety relevant information (e.g. wind speed for the drive) are directly exchanged by the systems and evaluated. Safety margins may come from the configuration server.

Is this enough to ensure run-number consistency?